NATIONAL ADVISORY COMMITTEE
FOR AERONAUTICS

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M.L. 289 (Monthly list of documents released by the NACA during April 1951)

Libraries in most of the important cities throughout the country, as well as libraries of schools, manufacturers, and other organizations dealing with aeronautics, are supplied copies of these publications for references.

TECHNICAL NOTES

TN 2286 Preliminary Investigation of a New Type of Supersonic Inlet.
By: Antonio Ferri and Louis M. Nucci.

TN 2315 Supersonic Lift and Pitching Moment of Thin Sweptback Tapered Wings Produced by Constant Vertical Acceleration. Subsonic Leading Edges and Supersonic Trailing Edges.
By: Frank S. Malvestuto, Jr., and Dorothy M. Hoover.

TN 2319 Some Properties of High-Purity Sintered Wrought Molybdenum Metal at Temperatures up to 2400° F.
By: R. A. Long, K. C. Dike, and H. R. Bear.

TN 2321 Analysis of Temperature Distribution in Liquid-Cooled Turbine Blades.
By: John N. B. Livingood and W. Byron Brown.

TN 2324 Fatigue Strengths of Aircraft Materials. Axial-Load Fatigue Tests on Unnotched Sheet Specimens of 24S-T3 and 75S-T6 Aluminum Alloys and of SAE 4130 Steel.
By: H. J. Grover, S. M. Bishop, and L. R. Jackson.

TN 2325 Development of Magnesium-Cerium Forged Alloys for Elevated-Temperature Service.
By: K. Grube, R. Kaiser, L. W. Eastwood, C. M. Schwartz, and H. C. Cross.

TN 2326 Two-Dimensional Subsonic Compressible Flows past Arbitrary Bodies by the Variational Method.
By: Chi-Teh Wang.

TN 2327 Fatigue Testing Machine for Applying a Sequence of Loads of Two Amplitudes.
By: Frank C. Smith, Darnley M. Howard, Ira Smith, and Richard Harwell.

TN 2328 Method for Determining Pressure Drop of Monatomic Gases Flowing in Turbulent Motion through Constant-Area Passages with Simultaneous Friction and Heat Addition.
By: M. F. Valerino and R. B. Doyle.

TN 2329 High-Temperature Protection of a Titanium-Carbide Ceramal with a Ceramic-Metal Coating Having a High Chromium Content.
By: Dwight G. Moore, Stanley G. Benner, and William N. Harrison.

TN 2330 Water-Landing Investigation of a Model Having Heavy Beam Loadings and 0° Angle of Dead Rise.
By: A. Ethelda McArver.

TN 2331 Wind-Tunnel Investigation of a Number of Total-Pressure Tubes at High Angles of Attack. Subsonic Speeds.
By: William Gracey, William Letko, and Walter R. Russell.

TN 2332 Analysis of the Effects of Wing Interference on the Tail Contributions to the Rolling Derivatives.
By: William H. Michael, Jr.

TN 2333 Transient Aerodynamic Behavior of an Airfoil Due to Different Arbitrary Modes of Nonstationary Motions in a Supersonic Flow.
By: Chieh-Chien Chang.

TN 2334 On Reflection of Shock Waves from Boundary Layers.
By: H. W. Liepmann, A. Roshko, and S. Dhawan.

TN 2335 A Plan-Form Parameter for Correlating Certain Aerodynamic Characteristics of Swept Wings.
By: Franklin W. Diederich.

TN 2336 Some Theoretical Characteristics of Trapezoidal Wings in Supersonic Flow and a Comparison of Several Wing-Flap Combinations.
By: Robert O. Piland.

TN 2337 Approximate Calculation of Turbulent Boundary-Layer Development in Compressible Flow.
By: Maurice Tucker.

TN 2338 Experimental Investigation of Localized Regions of Laminar-Boundary-Layer Separation.
By: William J. Bursnall and Laurence K. Loftin, Jr.

TN 2339 Transonic Flow past a Wedge Profile with Detached Bow Wave - General Analytical Method and Final Calculated Results.
By: Walter G. Vincenti and Cleo B. Wagoner.

TN 2340 A Survey of Methods for Determining Stability Parameters of an Airplane from Dynamic Flight Measurements.
By: Harry Greenberg.

TN 2341 A Least Squares Curve Fitting Method with Applications to the Calculation of Stability Coefficients from Transient-Response Data.
By: Marvin Shinbrot.

TN 2342 Evaluation of Packed Distillation Columns. I - Atmospheric Pressure.
By: Thaine W. Reynolds and George H. Sugimura.

TN 2343 Comparison of Theoretical and Experimental Response of a Single-Mode Elastic System in Hydrodynamic Impact.
By: Robert W. Miller and Kenneth F. Merten.

TN 2344 Method for Calculating Downwash Field Due to Lifting Surfaces at Subsonic and Supersonic Speeds.
By: Sidney M. Harmon.

TN 2345 The Effect of an Arbitrary Surface-Temperature Variation along a Flat Plate on the Convective Heat Transfer in an Incompressible Turbulent Boundary Layer.
By: Morris W. Rubesin.

TN 2349 Fluctuations in a Spray Formed by Two Impinging Jets.
By: Marcus F. Heidmann and Jack C. Humphrey.

TN 2351 An Experimental Investigation of the Effect of Surface Heating on Boundary-Layer Transition on a Flat Plate in Supersonic Flow.
By: Robert W. Higgins and Constantine C. Pappas.

TN 2354 A Numerical Approach to the Instability Problem of Monocoque Cylinders.
By: Bruno A. Boley, Joseph Kempner, and J. Mayers.

TN 2355 Achromatization of Debye-Scherrer Lines.
By: Hans Ekstein and Stanley Siegel.

TN 2360 Effect of Tail Surfaces on the Base Drag of a Body of Revolution at Mach Numbers of 1.5 and 2.0.
By: J. Richard Spahr and Robert R. Dickey.

REPORTS

Rept. 986 The Reversibility Theorem for Thin Airfoils in Subsonic and Supersonic Flow.
By: Clinton E. Brown.
Formerly issued as TN 1944.

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Rept. 991 The Application of the Statistical Theory of Extreme Values to Gust-Load Problems.
By: Harry Press.

Rept. 993 An Introduction to the Physical Aspects of Helicopter Stability.
By: Alfred Gessow and Kenneth B. Amer.

TECHNICAL MEMORANDUMS

TM 1276 Sideslip in a Viscous Compressible Gas.
By: V. V. Struminsky.

TM 1281 Unstable Capillary Waves on Surface of Separation of Two Viscous Fluids.
By: V. A. Borodin and Y. F. Dityakin.

TM 1283 Resistance of a Delta Wing in a Supersonic Flow.
By: E. A. Karpovich and F. I. Frankl.

TM 1286 Method of Successive Approximations for the Solution of Certain Problems in Aerodynamics.
By: M. E. Shvets.

TM 1294 Exhaust Turbine and Jet Propulsion Systems.
By: K. Leist and E. Knörnschild.

TM 1305 On Ionization and Luminescence in Flames.
By: E. Sänger, P. Goercke, and I. Bredt.

TM 1312 Calculation of the Bending Stresses in Helicopter Rotor Blades.
By: P. de Guillenchmidt.

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